



EMS Workshop

Tom Dietrich

July 17, 2019





Challenges and Best Practices



Environmental Management Systems

- Challenges will arise
- Look for the opportunities
- Communication is essential tool
- EMS is a pathway not a destination







Leadership and Commitment

<u>Challenges</u>

- EMS seen as a burden
- Leadership focused on non-EMS issues
- Accountability not enforced
- Staffing changes at the top

- Provide regular updates
- Promote successes
- Focus on appropriate level of detail
- Engage to gather input



Organizational Roles, Responsibilities, and Authorities

<u>Challenges</u>

- Lack authority to hold staff accountable
- Unclear assignment/overlap of responsibilities
- Fiefdoms

- Identify influencers
- Recruit champions
- Promote accountability
- Inform top management



Compliance Obligations

<u>Challenges</u>

- Too many responsibilities
- Lack of regulatory experience
- Fear of enforcement/fines
- Disorganized or not communicating

- Get informed
- Inform others
- Use as a tool to make change
- Keep up-to-date



Environmental Objectives

<u>Challenges</u>

- "Low hanging fruit" are gone
- No process for identifying needs
- Lack of top management support
- Progress seems slow

- Align with organizational goals
- Coordinate with sustainability
- Implement management of change
- Seek out ideas
- Monitor progress



Competence and Awareness

<u>Challenges</u>

- Training needs not identified
- Contractors often overlooked
- EMS not incorporated into daily duties
- Training is expensive, hard to organize

- Training helps avoid incident recurrences
- Incorporate EMS into contract language
- Conduct awareness survey
- Use informal formats— safety talk, morning meeting, on-the-job training



Exercise #1



Exercise #2



EMS Communication



EMS Communication

- Achieve Support for the EMS
- Make Progress on Objectives and Targets
- Increase Employee Buy In
- Improve Stakeholder Buy In

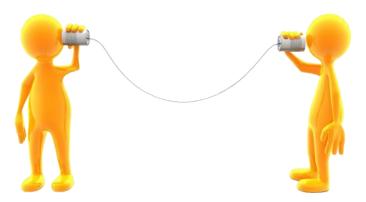




Communication— the good and bad

- What are the best methods?
- Is technology the answer? Which ones?
- Message sent, but was message received?
- How much to plan?







Communication Process

Identify Audiences

Identify Tools and Formats by Audience

Identify Process for Receiving and Responding to Inquiries

Launch Communication

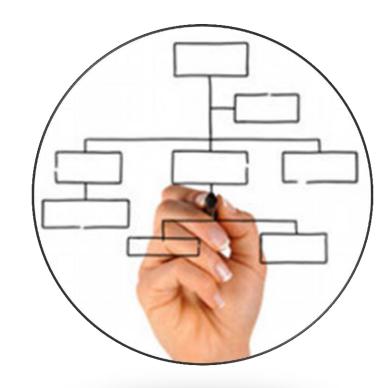
Follow-up with Inquiry/Communication





Identify Audiences

- Various levels in the organization
- Accessibility to technology
- Language barriers
- Interest level and background







Identify Tools and Formats

- Printed Media
- Events
- Programs
- Consistent messages
- Repeated in multiple formats





Communication Methods

- Conversations at the Water Cooler
- Meetings/Tailgate Talks
- Training
- Award/Recognition Programs
- Performance Plans
- Email/Memo/Newsletter
- Websites/Social Media
- Posters/Brochures
- Executive Committee Briefings
- Press Releases





Posters

Environmental Health and Safety Policy

Waste Commission of Scott County is committed to operating and providing the highest level of service in a safe, responsible manner that respects the environment and the health and safety of our employees, our customers, and our community. We will not compromise environmental, health or safety values for production or economic gain.

Waste Commission of Scott County employees are expected to understand, promote and assist in the implementation of this policy and the accompanying principles.

Pollution Prevention: We will minimize or prevent releases to air, water and land at all of our facilities.

Regulatory Compliance: We will meet or exceed all relevant environmental laws and regulations.

Outreach: We will be open, honest and transparent in all communications. We will educate the public and business community on the importance of environmental stewardship.

Training: We will train employees on environmental policies, rules and the goals and objectives set forth in the EMS. We will provide the necessary tools and resources and will promote and respect employee input and feedback. Additionally, we will train on and promote the health, safety and well-being of our employees both on and off the job because we believe our employees are our number one asset.

Evaluation: We will establish, measure and report objectives and targets annually.

Continuous Improvement: Through the use of our EMS, we will seek out ways to continually improve our environmental performance.

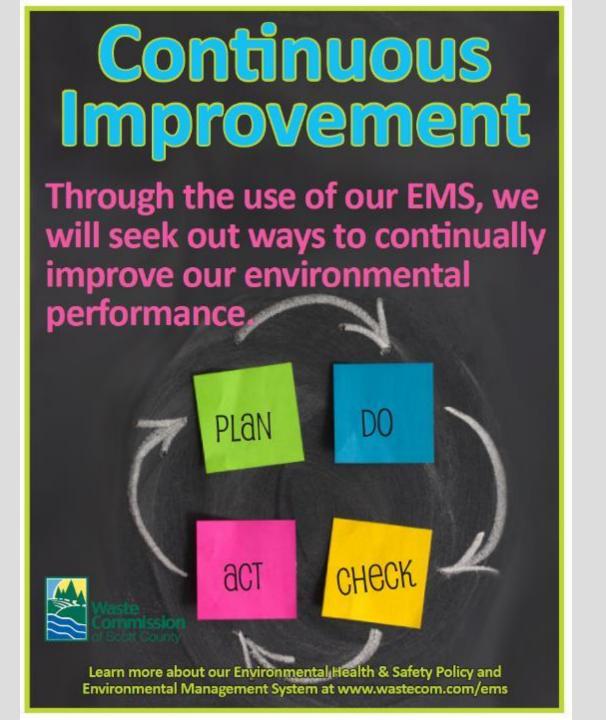
Think Green: We will minimize our use of raw materials by using recycled products, less toxic materials and renewable energy sources whenever possible. We will strive to be a leader of sustainable practices and technologies in Scott County and beyond.

Adopted by Waste Commission of Scott County on December 21, 2009.

Hatry Mario

Kathy Morris, Director







Think Green!

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YOUR HELP TO GET ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATION IN 2012

- BE FAMILIAR WITH THE DPU ENVIRONMENTAL POLICY
- RECOGNIZE HOW YOUR JOB CAN IMPACT THE ENVIRONMENT
- UNDERSTAND HOW YOU ARE REDUCING THE ENVIRONMENTAL IMPACTS
- RNOW TO CALL YOUR SUPERVISOR OR DAN HANKET WITH ENVIRONMENTAL QUESTIONS
- RNOW WHAT TO DO DURING AN ENVIRONMENTAL EMERGENCY

For more information, contact DPU's Environmental Management Representative, Dan Hanket at 645-3753.

City of Columbus
Department of Public Utilities





MEETING OUR COMMITMENTS

ENVIRONMENTAL POLICY SUMMARY

- Comply with laws and regulations
- Prevent pollution at its source
- Conserve natural resources
- Provide employees with resources to practice environmental stewardship
- Improve environmental performance
- **Encourage environmental** stewardship and sustainable development practices
- Use an EMS





MAKING A DIFFERENCE

Memos



Memorandum

Date: December 11, 2009
TO: Board of Directors

FROM: Marie DeVries, Planner/Contract Administrator

RE: Strategic Plan Update document

Environmental Management System (EMS)

Greetings! Following is information regarding two separate, but related, subjects.

Strategic Plan Update. Included is the 2007-2012 Strategic Plan update summarizing the outcomes of the September 25, 2009, workshop. Following your review, a motion to adopt is in order at your January 15, 2010, monthly meeting. Please email me comments or questions.

Environmental Management System (EMS). In 2008, the Iowa legislature passed House File 2570 regarding designation of Environmental Management Systems. EMS is defined as a set of processes and procedures developed by an organization to proactively manage its environmental impacts.

In October 2009 the Agency was selected as one of six pilots to initiate EMS and demonstrate how it works.

Assisting the six pilots with EMS development is Gresham Smith and Partners (GS&P), a consulting firm with extensive environmental compliance experience. In November, the process was kicked off with a two-day workshop led by GS & P and the Iowa DNR.

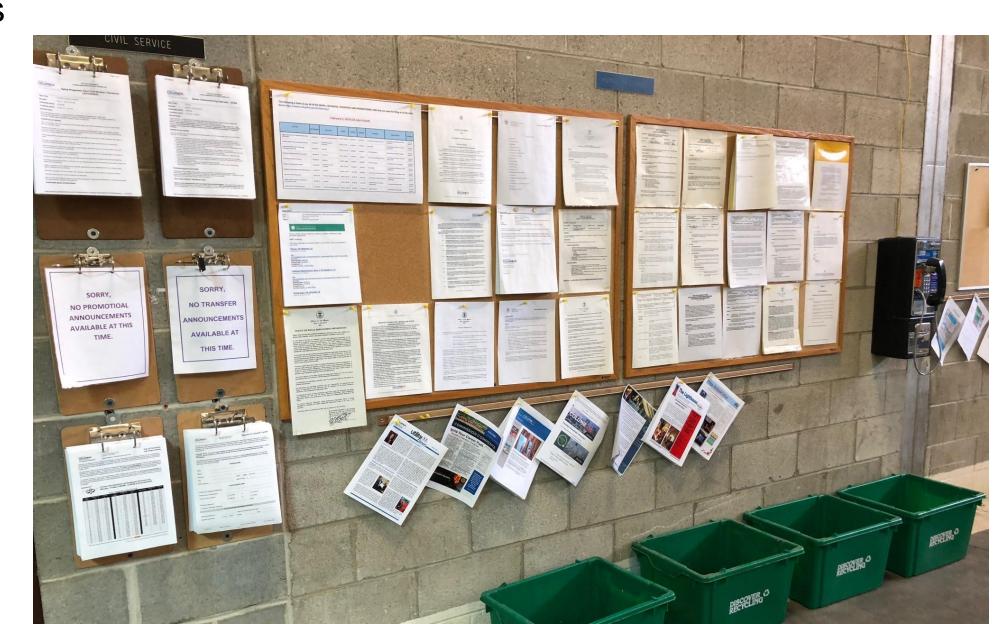
The pilot period is 12 months. We will identify targets, establish measurable objectives, and achieve environmental improvements in the areas of focus listed in the legislation—yard waste management, hazardous waste collection, water quality improvement, greenhouse gas reduction, recycling services, and environmental education.

Your Strategic Plan and EMS work together. Both are focused on continual improvement. EMS will concentrate on internal operations—establishing that the Agency "walk the talk." Among the internal operations we will evaluate are energy/fuel use, erosion control, and landfill gas collection—critical elements of the Agency's environmental impact.

More on EMS as it unfolds during 2010.



Bulletin Boards





County of Summit Department of Sanitary Sewer Services

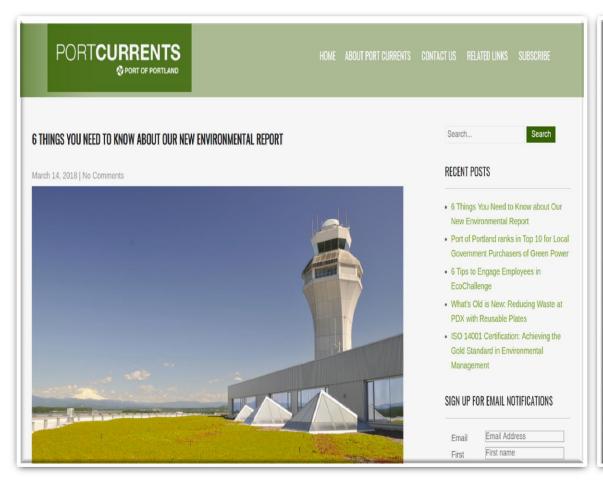
Environmental Policy

The Department of Sanitary Sewer Services' mission is to protect public health, contribute to a high standard of living, and provide a high level of consumer confidence. The Department is committed to quality service and fiscal responsibility. DSSS is committed to protecting the environment, and provisioning the collection, conveyance, and treatment of wastewater on behalf of customers in the sewer district. This environmental policy forms the foundation of the Department's environmental stewardship commitment.

To minimize environmental impacts DSSS shall:

- Comply with laws, regulations, and other requirements to which DSSS subscribes, which relate to its environmental
 aspects;
- Prevent pollution through the identification and implementation of best management practices;
- Continually work to conserve resources through waste prevention, reduction, reuse, and recycling;
- Provide employees the resources required to practice environmental stewardship in their daily roles,
 and heighten their awareness of environmental issues through the communication of this policy, training and written guidance on management and work practices;
- Continually improve environmental performance through proactive environmental management and routine assessment of our performance; and
- Provide a framework to utilize an environmental management system for operations.

Newsletters







Environmental Management System

February Monthly Tip





Lower Your Water Heater Temperature Saves Money & Energy

Although some manufacturers set water heater thermostats at 140 degrees F, many homeowners only set at 120 degrees F, which also slows mineral buildup and corrosion in your water heater and pipes. Water heated at 140 degrees F also poses a safety hazard—scalding.

Savings resulting from turning down your water heater temperature are based on two components:

- 1. Reduced standby losses (heat lost from water heater into surrounding basement area)
- 2. Consumption (from water demand or use in your home)

Set too high, or at 140 degrees F, your water heater can waste anywhere from \$36 to \$61 annually in standby heat losses and more than \$400 in demand losses.

If you have a dishwasher without a booster heater, it may require a water temperature within a range of 130-140 degrees F for optimum cleaning. And while there is a very slight risk of promoting legionellae bacteria when hot water tanks are maintained at 120 degrees F, this level is still considered safe for the majority of the population. If you have a suppressed immune system or chronic respiratory disease, you may consider keeping your hot water tank at 140 degrees F. However, this high temperature significantly increases the risk of scalding. To minimize this risk, you can install mixing valves or other temperature-regulating devices on any taps used for washing or bathing.

Source & Step-by-Step Instructions

Energy.gov & EnergyStar.gov

To learn more and read instructions, visit:

www.energy.gov/energysaver/projects/savings-project-lower-water-heating-temperature.



SHARE YOUR IDEAS for reducing your impact at work or home through the EMS suggestion box or contacting an EMS Core Team member: Jeff Dworek, Lastle Inbeck, Judi Mendanhall, Yuta Naganuma, Paul Nemmers or Rhonds O'Connor.



EMS Field Support & Document Control Continuous Improvement

February 2019

Facility Visits The Regulatory Compliance Section (RCS) conducted routine facility site visits for all staffed facilities across DPU in 2018, and they went so well we plan to continue this effort in 2019! 2018 visits focused on waste management in an effort to improve our performance in that area. Positive internal environmental compliance audit results confirmed the success of last year's site visits.



RCS staff will visit each facility approximately every other month. These site visits will provide field support for general environmental compliance, EMS implementation, and any other environmental concerns raised by our facilities.

All DPU facilities will be visited in February or March, at which time RCS will review annual updates to Environmental Compliance Plans, Document Control Lists and Key Monitoring Equipment Lists. These annual updates help keep our facilities aware of changing environmental requirements and greatly assist with maintaining an up-to-date EMS.

<u>Document Control</u> While waste management was stressed during 2018 site visits, document control improvements will be a focus area this year based on last year's audit results. The goal of document control is to ensure that end users of a particular document are using the most current version. This sounds simple enough but it's very easy to have multiple versions of a form, SOP or work instruction in use at a facility – we have the audit results to prove it!

Good document control practices, such as including revision dates on documents, reviewing documents at least annually to make sure they remain relevant, and controlling access to documents (by hard copy or digitally) helps keep everyone on the same page concerning performing the important day to day tasks across DPU.



Upcoming 2019 Internal Audits Annual internal audits will begin in April and will be completed by the end of August. The internal audit program was recommended by the EMS Core Team and approved by the EMS Steering Team. All 2019 internal audits are already scheduled. The complete internal audit schedule is available for review upon request.

Stall Talk



Make sure you are not their next star!

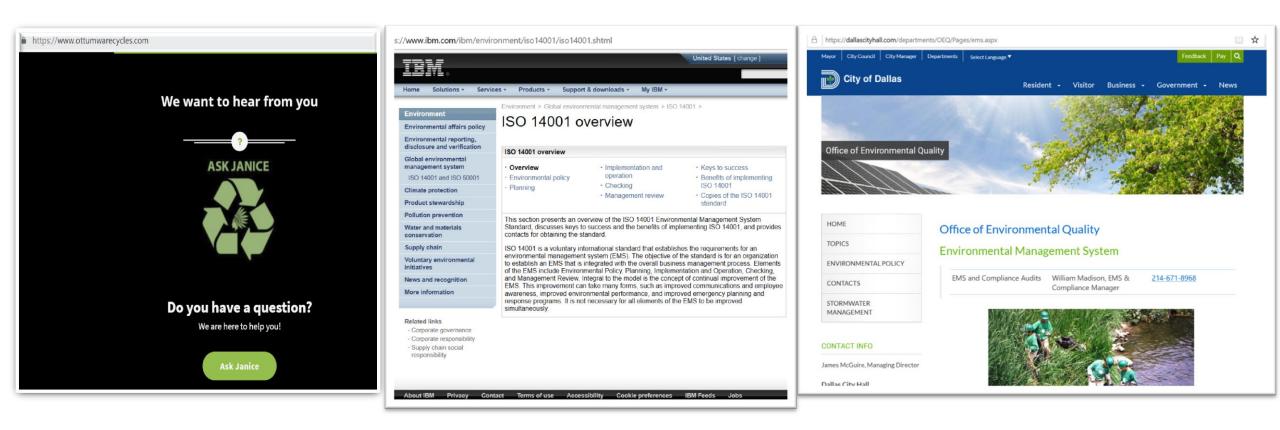
Remember, they are taping at the

Fuel Islands, If you have a spill there,

you need to make sure that it is

completely cleaned up!

Websites

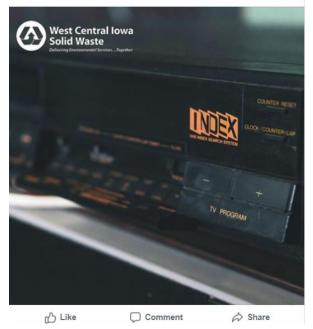




Social Media

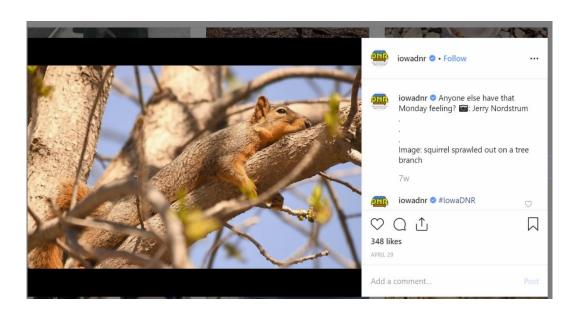


Technology needs recycling too! We're constantly upgrading or replacing to the next best thing, or the newest and latest. But what happens to the old tech?! We recycle! Cost of recycling any size monitors, TV's, or laptop's is \$10.00 per item from either businesses or residents. Printers, fax machines, stereo equipment, VCR's, hard drives, copiers, keyboards, mouse and the cables are free.











4.3K like this · Des Moines, Iowa · Waste Management Company

Jun 14 · ❸ · ...to do when you're done with it? Metro Waste Authority wants to make it easy for you to do the right thing when it's time to get rid of hazardous waste. When this type of waste is disposed of improperly in the trash or down the drain, it can cause harm to people, pets, and the...



16

12 Comments 14 Shares

Metro Waste Authority

4.3K like this · Des Moines, Iowa · Waste Management Company

Jun 15 · 🕙 · ... Are you planning an event? Let Metro Waste Authority help you plan ahead for the recyclables your event is sure to generate! We try to make it as easy as possible to dispose of waste responsibly and efficiently. That's why we provide large and small recycling stands for community...



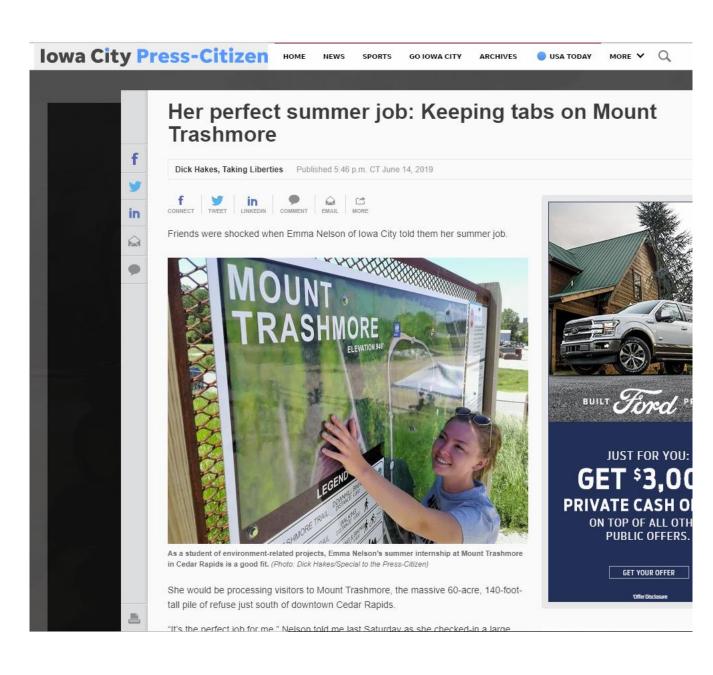
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3 Comments 14 Shares



Press Releases





Logos









Mascot







Eco Gecko – City of Scottsdale, AZ



Rocky from Paw Patrol– Great River Regional Waste Authority



Receiving and Responding

- Identify and Publish Methods for Receiving Information and Ideas Regarding the EMS
- Before Launching, Consider Responses and Timeframes
- Also Consider Scope of Internal Communication





More Challenges and Best Practices



Documented Information

<u>Challenges</u>

- Disorganization or over-documentation
- Eliminating outdated documents
- Providing access to documents
- Documents of external origin

- Be systematic
- Recognize staff circumstances
- Identify need for updates
- Incorporate external documents



Operational Planning and Control

<u>Challenges</u>

- Resistance to change
- Unidentified potential risks/impacts
- Implementing new procedures

- Use EMS to implement needed changes
- Focus on significant aspects
- Document, as needed
- Follow up with training



Emergency Preparedness and Response

<u>Challenges</u>

- Lack of funding/resources
- Staff buy-in
- Keeping plans updated and accessible

- Test the plans for adequacy and modify
- Coordinate with external agencies
- Train staff
- Maintain the plans



Performance Evaluation

<u>Challenges</u>

- Data management/analysis
- Managing perception of results
- More evaluation leads to more findings

- Identify trends
- Normalize data
- Provide context for results
- Communicate with top management



Internal Audit Program

<u>Challenges</u>

- Staff afraid of punishment
- Lack of management support
- Auditor training
- Audits get boring or repetitive

- Embrace continual improvement
- Be receptive to findings
- Innovate to avoid excessive repetition



Management Review

<u>Challenges</u>

- Too much content for one meeting
- Discussion without decisions
- Heavy reliance on Environmental Manager

- Build into existing meetings, if possible
- Identify substantive topics
- Engage for adequate decision-making
- Document results and follow up tasks



Nonconformity and Corrective Action

Challenges

- Insufficient investigations
- Identifying root causes
- Evaluating corrective action effectiveness

Best Practices

- Investigate with substance
- Develop a procedure
- Track progress and follow through
- Review effectiveness of corrective actions



"To address this mistake we must use root-cause analysis. I'll begin by saying it's not my fault."

Continual Improvement

Challenges

- Status quo mentality
- Desire/need for short-term outcomes
- Nay-sayers

- Embrace change
- Look at the long game
- Celebrate incremental successes
- Understand the organization is made up of individuals



Exercise #3



Questions?

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